

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/001858

Box No. I

Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material
    - in written format
    - in computer readable form
  - c. time of filing/furnishing
    - contained in the international application as filed
    - filed together with the international application in computer readable form
    - furnished subsequently to this Authority for the purposes of search
2.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

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### Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

- 1  Claims Nos. :  
because they relate to subject matter not required to be searched by this Authority; namely:  
Remarks: Claims 1-29 and 43-53 are considered to be directed towards methods of medical treatment of a human or animal which the authority is not required to search under Rule 39.1(iv) of the PCT. The search has therefore been established based on the use of the ghrelin, unacylated ghrelin and analogs thereof.
- 2  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :
- 3  Claims Nos. :  
because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule

### Box III Observation where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

- 1  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
- 2  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
- 3  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos. :
- 4  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos. :

**Remark on Protest**  The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7: A61K 38/25; A61P 3/10

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
IPC 7: A61K 38/25; A61P 3/10

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used)  
Canadian Patent Database, Genbank, Pubmed, Delphion, Dgene; Keywords: ghrelin, unacylated ghrelin, insulin, diabetes, metabolic syndrome, obesity

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CA2470235 THERATECHNOLOGIES INC., (Ghigo E. et al.) 26 June 2003 page 7, lines 24 to page 9, lines 5; page 12, line 24 to page 13, line 15, Figures 5A-5B; claims	1-7, 15-16, 19-20, 25-31, 34-35, 40-46, 54, 56, 58-64, 74- 75, and 80- 86
Y	Whole document	8-14, 17-18, 21-24, 32-33, 36-39, 47-53, 55, 57, 65-73, and 76-79
P, X	BROGLIO F et al. "Non-acylated ghrelin counteracts the metabolic but not the neuroendocrine response to acylated ghrelin in humans", JOURNAL OF CLINICAL ENDOCRINOLOGY METABOLISM. June 2004 vol 89(6) pages 3062-3065.	1-7, 15-16, 19-20, 25-31, 34-35, 40-46, 54, 56, 58-64, 74- 75, and 80- 86
P, Y		8-14, 17-18, 21-24, 32-33, 36-39, 47-53, 55, 57, 65-73, and 76-79

Further documents are listed in the continuation of Box C.

Patent family members are listed in annex.

\* Special categories of cited documents :  
"A" document defining the general state of the art which is not considered  
to be of particular relevance  
"E" earlier application or patent but published on or after the international  
filing date  
"L" document which may throw doubts on priority claim(s) or which is  
cited to establish the publication date of another citation or other  
special reason (as specified)  
"O" document referring to an oral disclosure, use, exhibition or other  
means  
"P" document published prior to the international filing date but later than  
the priority date claimed

later document published after the international filing date or  
priority date and not in conflict with the application but cited  
to understand the principle or theory underlying the invention  
"X" document of particular relevance; the claimed invention cannot  
be considered novel or cannot be considered to involve an  
inventive step when the document is taken alone  
"Y" document of particular relevance; the claimed invention cannot  
be considered to involve an inventive step when the document  
is combined with one or more other such documents, such  
combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international-type search  
25 January 2005 (25-01-2005)

Date of mailing of the international-type search report  
02 March 2005 (02-03-2005)

Name and mailing address of the ISA/  
Commissioner of Patents  
Canadian Patent Office - PCT  
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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A	CA2471879 DAIICHI SUNTORY PHARMA CO LTD., (Minaimitate Y. et al.) 27 November 2003 Whole document	
P, A	POYKKO SM. et al. "Low Plasma Ghrelin Is Associated with Insulin Resistance, Hypertension and the Prevalence of Type 2 Diabetes", October 2003 DIABETES, vol. (52), pages 2546-2553	

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.  
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Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
CA2470235	26-06-2003	EP1455814 A2 WO03051389 A2	15-09-2004 26-06-2003
CA2471879	27-11-2003	WO03097083 A1	27-11-2003